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11 Internet Printing Protocol/1.1: "media" Engineering attribute values extension
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14 Status of this Memo

15 This document is an Internet-Draft and is in full conformance with all provisions of Section 10 of
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24 **Abstract**

25 This document specifies additional type3 keyword values for the IPP/1.1 "media" Job Template attribute
26 for use with the Internet Printing Protocol/1.1 (IPP). ~~These~~ is additional attribute values permits the client
27 to specify additional media options, including values of media common to engineering drawings. For
28 completeness, all of the existing "media" keyword values are included as well.

29 The full set of IPP documents includes:

- 30 Design Goals for an Internet Printing Protocol [RFC2567]
- 31 Rationale for the Structure and Model and Protocol for the Internet Printing Protocol [RFC2568]
- 32 Internet Printing Protocol/1.1: Model and Semantics [ipp-mod]
- 33 Internet Printing Protocol/1.1: Encoding and Transport [ipp-pro]
- 34 Internet Printing Protocol/1.1: Implementer's Guide [ipp-iig]
- 35 Mapping between LPD and IPP Protocols [RFC2569]

36
37 The "Design Goals for an Internet Printing Protocol" document takes a broad look at distributed printing
38 functionality, and it enumerates real-life scenarios that help to clarify the features that need to be included
39 in a printing protocol for the Internet. It identifies requirements for three types of users: end users,
40 operators, and administrators. It calls out a subset of end user requirements that are satisfied in IPP/1.0. A
41 few OPTIONAL operator operations have been added to IPP/1.1.

42 The "Rationale for the Structure and Model and Protocol for the Internet Printing Protocol" document
43 describes IPP from a high level view, defines a roadmap for the various documents that form the suite of
44 IPP specification documents, and gives background and rationale for the IETF working group's major
45 decisions.

46 The "Internet Printing Protocol/1.1: Encoding and Transport" document is a formal mapping of the abstract
47 operations and attributes defined in the model document onto HTTP/1.1 [RFC2616]. It defines the
48 encoding rules for a new Internet MIME media type called "application/ipp". This document also defines
49 the rules for transporting over HTTP a message body whose Content-Type is "application/ipp". This
50 document defines a new scheme named 'ipp' for identifying IPP printers and jobs.

51 The "Internet Printing Protocol/1.1: Implementer's Guide" document gives insight and advice to
52 implementers of IPP clients and IPP objects. It is intended to help them understand IPP/1.1 and some of
53 the considerations that may assist them in the design of their client and/or IPP object implementations. For
54 example, a typical order of processing requests is given, including error checking. Motivation for some of
55 the specification decisions is also included.

56 The "Mapping between LPD and IPP Protocols" document gives some advice to implementers of gateways
57 between IPP and LPD (Line Printer Daemon) implementations.

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73

74 1 Additional values for the "media" Job Template attribute

75 1.1 Problem

76 Need additional type3 keyword values for media to support the additional sizes and types of media
77 common to engineering drawings.

78 1.2 Suggested solution

79 This solution is a new solution to address the unique requirements for the engineering market. The
80 suggestion is to add additional type3 keyword values to the "media" Job Template attributes (also applies to
81 "media-default", "media-supported" and "media-ready" attributes).

82

83 1.3 Proposed Text

84 Add the following paragraphs indicated with revision marks to the description of the "media" Job Template
85 attribute (section 4.2.11), References (section 9), and Appendix C: "media" keyword values (section 14), so
86 that the entire sections would be:

87 **4.2.11 media (type3 keyword | name(MAX))**

88 This attribute identifies the medium that the Printer uses for all impressions of the Job.

89 The values for "media" include medium-names, medium-sizes, input-trays and electronic forms so that one
90 attribute specifies the media. If a Printer object supports a medium name as a value of this attribute, such a
91 medium name implicitly selects an input-tray that contains the specified medium. If a Printer object
92 supports a medium size as a value of this attribute, such a medium size implicitly selects a medium name
93 that in turn implicitly selects an input-tray that contains the medium with the specified size. If a Printer
94 object supports an input-tray as the value of this attribute, such an input-tray implicitly selects the medium
95 that is in that input-tray at the time the job prints. This case includes manual-feed input-trays. If a Printer
96 object supports an electronic form as the value of this attribute, such an electronic form implicitly selects a
97 medium-name that in turn implicitly selects an input-tray that contains the medium specified by the
98 electronic form. The electronic form also implicitly selects an image that the Printer MUST merge with the
99 document data as its prints each page.

100 Standard keyword values are ~~(taken from ISO DPA, and the Printer MIB and ASME-Y14.1M)~~ and are
101 listed in section 14. An administrator MAY define additional values using the 'name' or 'keyword' attribute
102 syntax, depending on implementation.

103 There is also an additional Printer attribute named "media-ready" which differs from "media-supported" in
104 that legal values only include the subset of "media-supported" values that are physically loaded and ready

105 for printing with no operator intervention required. If an IPP object supports "media-supported", it NEED
106 NOT support "media-ready".

107 The relationship of this attribute and the other attributes that control document processing is described in
108 section 15.3.

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231

232 The following text includes all of the current Appendix C in [ipp-mod] plus additional values:

233 **14. APPENDIX C: "media" keyword values**

234 Standard keyword values are taken from several sources.

235 Standard values are defined (taken from DPA[ISO10175] and the Printer MIB[RFC1759]):

- 236 'default': The default medium for the output device
- 237 'iso-a4-white': Specifies the ISO A4 white medium: [210 mm x 297 mm](#)
- 238 'iso-a4-colored': Specifies the ISO A4 colored medium: [210 mm x 297 mm](#)
- 239 'iso-a4-transparent': Specifies the ISO A4 transparent medium: [210 mm x 297 mm](#)
- 240 'iso-a3-white': Specifies the ISO A3 white medium: [297 mm x 420 mm](#)
- 241 'iso-a3-colored': Specifies the ISO A3 colored medium: [297 mm x 420 mm](#)
- 242 'iso-a5-white': Specifies the ISO A5 white medium: [148 mm x 210 mm](#)
- 243 'iso-a5-colored': Specifies the ISO A5 colored medium: [148 mm x 210 mm](#)
- 244 'iso-b4-white': Specifies the ISO B4 white medium: [250 mm x 353 mm](#)
- 245 'iso-b4-colored': Specifies the ISO B4 colored medium: [250 mm x 353 mm](#)
- 246 'iso-b5-white': Specifies the ISO B5 white medium: [176 mm x 250 mm](#)
- 247 'iso-b5-colored': Specifies the ISO B5 colored medium: [176 mm x 250 mm](#)
- 248 'jis-b4-white': Specifies the JIS B4 white medium: [257 mm x 364 mm](#)
- 249 'jis-b4-colored': Specifies the JIS B4 colored medium: [257 mm x 364 mm](#)
- 250 'jis-b5-white': Specifies the JIS B5 white medium: [182 mm x 257 mm](#)
- 251 'jis-b5-colored': Specifies the JIS B5 colored medium: [182 mm x 257 mm](#)

252

253 The following standard values are defined for North American media:

- 254 'na-letter-white': Specifies the North American letter white medium
- 255 'na-letter-colored': Specifies the North American letter colored medium
- 256 'na-letter-transparent': Specifies the North American letter transparent medium
- 257 'na-legal-white': Specifies the North American legal white medium
- 258 'na-legal-colored': Specifies the North American legal colored medium

259

260 The following standard values are defined for envelopes:

- 261 'iso-b4-envelope': Specifies the ISO B4 envelope medium
- 262 'iso-b5-envelope': Specifies the ISO B5 envelope medium
- 263 'iso-c3-envelope': Specifies the ISO C3 envelope medium
- 264 'iso-c4-envelope': Specifies the ISO C4 envelope medium
- 265 'iso-c5-envelope': Specifies the ISO C5 envelope medium
- 266 'iso-c6-envelope': Specifies the ISO C6 envelope medium
- 267 'iso-designated-long-envelope': Specifies the ISO Designated Long envelope medium
- 268 'na-10x13-envelope': Specifies the North American 10x13 envelope medium
- 269 'na-9x12-envelope': Specifies the North American 9x12 envelope medium
- 270 'monarch-envelope': Specifies the Monarch envelope
- 271 'na-number-10-envelope': Specifies the North American number 10 business envelope medium
- 272 'na-7x9-envelope': Specifies the North American 7x9 inch envelope
- 273 'na-9x11-envelope': Specifies the North American 9x11 inch envelope
- 274 'na-10x14-envelope': Specifies the North American 10x14 inch envelope
- 275 'na-number-9-envelope': Specifies the North American number 9 business envelope
- 276 'na-6x9-envelope': Specifies the North American 6x9 inch envelope
- 277 'na-10x15-envelope': Specifies the North American 10x15 inch envelope

278

279 The following standard values are defined for the less commonly used media ~~(white-only)~~:

- 280 'executive-white': Specifies the white executive medium
- 281 'folio-white': Specifies the folio white medium
- 282 'invoice-white': Specifies the white invoice medium
- 283 'ledger-white': Specifies the white ledger medium
- 284 'quarto-white': Specified the white quarto medium
- 285 'iso-a0-white': Specifies the ISO A0 white medium: 841 mm x 1189 mm
- 286 'iso-a0-transparent': Specifies the ISO A0 transparent medium: 841 mm x 1189 mm
- 287 'iso-a0-translucent': Specifies the ISO A0 translucent medium: 841 mm x 1189 mm
- 288 'iso-a1-white': Specifies the ISO A1 white medium: 594 mm x 841 mm
- 289 'iso-a1-transparent': Specifies the ISO A1 transparent medium: 594 mm x 841 mm
- 290 'iso-a1-translucent': Specifies the ISO A1 translucent medium: 594 mm x 841 mm
- 291 'iso-a2-white': Specifies the ISO A2 white medium: 420 mm x 594 mm
- 292 'iso-a2-transparent': Specifies the ISO A2 transparent medium: 420 mm x 594 mm
- 293 'iso-a2-translucent': Specifies the ISO A2 translucent medium: 420 mm x 594 mm
- 294 'iso-a3-transparent': Specifies the ISO A3 transparent medium: 297 mm x 420 mm
- 295 'iso-a3-translucent': Specifies the ISO A3 translucent medium: 297 mm x 420 mm
- 296 'iso-a4-translucent': Specifies the ISO A4 translucent medium: 210 mm x 297 mm
- 297 'iso-a5-transparent': Specifies the ISO A5 transparent medium: 148 mm x 210 mm
- 298 'iso-a5-translucent': Specifies the ISO A5 translucent medium: 148 mm x 210 mm
- 299 'iso-a6-white': Specifies the ISO A6 white medium: 105 mm x 148 mm
- 300 'iso-a7-white': Specifies the ISO A7 white medium: 74 mm x 105 mm
- 301 'iso-a8-white': Specifies the ISO A8 white medium: 52 mm x 74 mm
- 302 'iso-a9-white': Specifies the ISO A9 white medium: 37 mm x 52 mm

303 'iso-10-white': Specifies the ISO A10 white medium: 26 mm x 37 mm
304 'iso-b0-white': Specifies the ISO B0 white medium: 1000 mm x 1414 mm
305 'iso-b1-white': Specifies the ISO B1 white medium: 707 mm x 1000 mm
306 'iso-b2-white': Specifies the ISO B2 white medium: 500 mm x 707 mm
307 'iso-b3-white': Specifies the ISO B3 white medium: 353 mm x 500 mm
308 'iso-b6-white': Specifies the ISO B6 white medium: 125 mm x 176 mm
309 'iso-b7-white': Specifies the ISO B7 white medium: 88 mm x 125 mm
310 'iso-b8-white': Specifies the ISO B8 white medium: 62 mm x 88 mm
311 'iso-b9-white': Specifies the ISO B9 white medium: 44 mm x 62 mm
312 'iso-b10-white': Specifies the ISO B10 white medium: 31 mm x 44 mm
313 'jis-b0-white': Specifies the JIS B0 white medium: 1030 mm x 1456 mm
314 'jis-b0-transparent': Specifies the JIS B0 transparent medium: 1030 mm x 1456 mm
315 'jis-b0-translucent': Specifies the JIS B0 translucent medium: 1030 mm x 1456 mm
316 'jis-b1-white': Specifies the JIS B1 white medium: 728 mm x 1030 mm
317 'jis-b1-transparent': Specifies the JIS B1 transparent medium: 728 mm x 1030 mm
318 'jis-b1-translucent': Specifies the JIS B1 translucent medium: 728 mm x 1030 mm
319 'jis-b2-white': Specifies the JIS B2 white medium: 515 mm x 728 mm
320 'jis-b2-transparent': Specifies the JIS B2 transparent medium: 515 mm x 728 mm
321 'jis-b2-translucent': Specifies the JIS B2 translucent medium: 515 mm x 728 mm
322 'jis-b3-white': Specifies the JIS B3 white medium: 364 mm x 515 mm
323 'jis-b3-transparent': Specifies the JIS B3 transparent medium: 364 mm x 515 mm
324 'jis-b3-translucent': Specifies the JIS B3 translucent medium: 364 mm x 515 mm
325 'jis-b4-transparent': Specifies the JIS B4 transparent medium: 257 mm x 364 mm
326 'jis-b4-translucent': Specifies the JIS B4 translucent medium: 257 mm x 364 mm
327 'jis-b5-transparent': Specifies the JIS B5 transparent medium: 182 mm x 257 mm
328 'jis-b5-translucent': Specifies the JIS B5 translucent medium: 182 mm x 257 mm
329 'jis-b6-white': Specifies the JIS B6 white medium: 128 mm x 182 mm
330 'jis-b7-white': Specifies the JIS B7 white medium: 91 mm x 128 mm
331 'jis-b8-white': Specifies the JIS B8 white medium: 64 mm x 91 mm
332 'jis-b9-white': Specifies the JIS B9 white medium: 45 mm x 64 mm
333 'jis-b10-white': Specifies the JIS B10 white medium: 32 mm x 45 mm

334

335 The following standard values are defined for American Standard (i.e. ANSI) engineering media (~~white~~
336 ~~only~~):

337 'a-white': Specifies the engineering ANSI A size white medium: 8.5 inches x 11 inches
338 'a-transparent': Specifies the engineering ANSI A size transparent medium: 8.5 inches x 11 inches
339 'a-translucent': Specifies the engineering ANSI A size translucent medium: 8.5 inches x 11 inches
340 'b-white': Specifies the engineering ANSI B size white medium: 11 inches x 17 inches
341 'b-transparent': Specifies the engineering ANSI B size transparent medium: 11 inches x 17 inches
342 'b-translucent': Specifies the engineering ANSI B size translucent medium: 11 inches x 17 inches
343 'c-white': Specifies the engineering ANSI C size white medium: 17 inches x 22 inches
344 'c-transparent': Specifies the engineering ANSI C size transparent medium: 17 inches x 22 inches
345 'c-translucent': Specifies the engineering ANSI C size translucent medium: 17 inches x 22 inches
346 'd-white': Specifies the engineering ANSI D size white medium: 22 inches x 34 inches

347 'd-transparent': Specifies the engineering ANSI D size transparent medium: 22 inches x 34 inches
348 'd-translucent': Specifies the engineering ANSI D size translucent medium: 22 inches x 34 inches
349 'e-white': Specifies the engineering ANSI E size white medium: 34 inches x 44 inches
350 'e-transparent': Specifies the engineering ANSI E size transparent medium: 34 inches x 44 inches
351 'e-translucent': Specifies the engineering ANSI E size translucent medium: 34 inches x 44 inches
352

353 The following standard values are defined for American Standard (i.e. ANSI) engineering media for
354 devices that provide the "synchro-cut" feature (see section 14.1):

355 'axsynchro-white': Specifies the roll paper having the width of the longer edge (11 inches) of the
356 engineering ANSI A size white medium and cuts synchronizing with data.
357 'axsynchro-transparent': Specifies the roll paper having the width of the longer edge (11 inches) of the
358 engineering ANSI A size transparent medium and cuts synchronizing with data.
359 'axsynchro-translucent': Specifies the roll paper having the width of the longer edge (11 inches) of the
360 engineering ANSI A size translucent medium and cuts synchronizing with data.
361 'bxsynchro-white': Specifies the roll paper having the width of the longer edge (17 inches) of the
362 engineering ANSI B size white medium and cuts synchronizing with data.
363 'bxsynchro-transparent': Specifies the roll paper having the width of the longer edge (17 inches) of the
364 engineering ANSI B size transparent medium and cuts synchronizing with data.
365 'bxsynchro-translucent': Specifies the roll paper having the width of the longer edge (17 inches) of the
366 engineering ANSI B size translucent medium and cuts synchronizing with data.
367 'cxsynchro-white': Specifies the roll paper having the width of the longer edge (22 inches) of the
368 engineering ANSI C size white medium and cuts synchronizing with data.
369 'cxsynchro-transparent': Specifies the roll paper having the width of the longer edge (22 inches) of the
370 engineering ANSI C size transparent medium and cuts synchronizing with data.
371 'cxsynchro-translucent': Specifies the roll paper having the width of the longer edge (22 inches) of the
372 engineering ANSI C size translucent medium and cuts synchronizing with data.
373 'dxsynchro-white': Specifies the roll paper having the width of the longer edge (34 inches) of the
374 engineering ANSI D size white medium and cuts synchronizing with data.
375 'dxsynchro-transparent': Specifies the roll paper having the width of the longer edge (34 inches) of the
376 engineering ANSI D size transparent medium and cuts synchronizing with data.
377 'dxsynchro-translucent': Specifies the roll paper having the width of the longer edge (34 inches) of the
378 engineering ANSI D size translucent medium and cuts synchronizing with data.
379 'exsynchro-white': Specifies the roll paper having the width of the longer edge (44 inches) of the
380 engineering ANSI E size white medium and cuts synchronizing with data.
381 'exsynchro-transparent': Specifies the roll paper having the width of the longer edge (44 inches) of the
382 engineering ANSI E size transparent medium and cuts synchronizing with data.
383 'exsynchro-translucent': Specifies the roll paper having the width of the longer edge (44 inches) of the
384 engineering ANSI E size translucent medium and cuts synchronizing with data.
385

386 The following standard values are defined for American Architectural engineering media:

387 'arch-a-white': Specifies the Architectural A size white medium: 9 inches x 12 inches
388 'arch-a-transparent': Specifies the Architectural A size transparent medium: 9 inches x 12 inches
389 'arch-a-translucent': Specifies the Architectural A size translucent medium: 9 inches x 12 inches

390 'arch-b-white': Specifies the Architectural B size white medium: 12 inches x 18 inches
391 'arch-b-transparent': Specifies the Architectural B size transparent medium: 12 inches x 18 inches
392 'arch-b-translucent': Specifies the Architectural B size translucent medium: 12 inches x 18 inches
393 'arch-c-white': Specifies the Architectural C size white medium: 18 inches x 24 inches
394 'arch-c-transparent': Specifies the Architectural C size transparent medium: 18 inches x 24 inches
395 'arch-c-translucent': Specifies the Architectural C size translucent medium: 18 inches x 24 inches
396 'arch-d-white': Specifies the Architectural D size white medium: 24 inches x 36 inches
397 'arch-d-transparent': Specifies the Architectural D size transparent medium: 24 inches x 36 inches
398 'arch-d-translucent': Specifies the Architectural D size translucent medium: 24 inches x 36 inches
399 'arch-e-white': Specifies the Architectural E size white medium: 36 inches x 48 inches
400 'arch-e-transparent': Specifies the Architectural E size transparent medium: 36 inches x 48 inches
401 'arch-e-translucent': Specifies the Architectural E size translucent medium: 36 inches x 48 inches
402

403 The following standard values are defined for American Architectural engineering media for devices that
404 provide the "synchro-cut" feature (see section 14.1):

405 'arch-axsynchro-white': Specifies the roll paper having the width of the longer edge (12 inches) of the
406 Architectural A size white medium and cuts synchronizing with data.
407 'arch-axsynchro-transparent': Specifies Specifies the roll paper having the width of the longer edge (12
408 inches) of the Architectural A size transparent medium and cuts synchronizing with data.
409 'arch-axsynchro-translucent': Specifies Specifies the roll paper having the width of the longer edge (12
410 inches) of the Architectural A size translucent medium and cuts synchronizing with data.
411 'arch-bxsynchro-white': Specifies the roll paper having the width of the longer edge (18 inches) of the
412 Architectural B size white medium and cuts synchronizing with data.
413 'arch-bxsynchro-transparent': Specifies the roll paper having the width of the longer edge (18 inches)
414 of the Architectural B size transparent medium and cuts synchronizing with data.
415 'arch-bxsynchro-translucent': Specifies the roll paper having the width of the longer edge (18 inches) of
416 the Architectural B size translucent medium and cuts synchronizing with data.
417 'arch-cxsynchro-white': Specifies the roll paper having the width of the longer edge (24 inches) of the
418 Architectural C size white medium and cuts synchronizing with data.
419 'arch-cxsynchro-transparent': Specifies the roll paper having the width of the longer edge (24 inches) of
420 the Architectural C size transparent medium and cuts synchronizing with data.
421 'arch-cxsynchro-translucent': Specifies the roll paper having the width of the longer edge (24 inches) of
422 the Architectural C size translucent medium and cuts synchronizing with data.
423 'arch-dxsynchro-white': Specifies the roll paper having the width of the longer edge (36 inches) of the
424 Architectural D size white medium and cuts synchronizing with data.
425 'arch-dxsynchro-transparent': Specifies the roll paper having the width of the longer edge (36 inches)
426 of the Architectural D size transparent medium and cuts synchronizing with data.
427 'arch-dxsynchro-translucent': Specifies the roll paper having the width of the longer edge (36 inches) of
428 the Architectural D size translucent medium and cuts synchronizing with data.
429 'arch-exsynchro-white': Specifies the roll paper having the width of the longer edge (48 inches) of the
430 Architectural E size white medium and cuts synchronizing with data.
431 'arch-exsynchro-transparent': Specifies the roll paper having the width of the longer edge (48 inches) of
432 the Architectural E size transparent medium and cuts synchronizing with data.

433 'arch-exsynchro-translucent': Specifies the roll paper having the width of the longer edge (48 inches) of
434 the Architectural E size translucent medium and cuts synchronizing with data.
435

436 The following standard values are defined for Japanese and European Standard (i.e. ISO) engineering
437 media, which are of a long fixed size [ASME-Y14.1M]:

438 'iso-a1x3-white': Specifies the ISO A1X3 white medium having the width of the longer edge (841
439 mm) of the ISO A1 medium
440 'iso-a1x3-transparent': Specifies the ISO A1X3 transparent medium having the width of the longer
441 edge (841 mm) of the ISO A1 medium
442 'iso-a1x3-translucent': Specifies the ISO A1X3 translucent medium having the width of the longer
443 edge (841 mm) of the ISO A1 medium
444 'iso-a1x4-white': Specifies the ISO A1X4 white medium having the width of the longer edge (841
445 mm) of the ISO A1 medium
446 'iso-a1x4-transparent': Specifies the ISO A1X4 transparent medium having the width of the longer
447 edge (841 mm) of the ISO A1 medium
448 'iso-a1x4-translucent': Specifies the ISO A1X4 translucent medium having the width of the longer
449 edge (841 mm) of the ISO A1 medium
450 'iso-a2x3-white': Specifies the ISO A2X3 white medium having the width of the longer edge (594
451 mm) of the ISO A2 medium
452 'iso-a2x3-transparent': Specifies the ISO A2X3 transparent medium having the width of the longer
453 edge (594 mm) of the ISO A2 medium
454 'iso-a2x3-translucent': Specifies the ISO A2X3 translucent medium having the width of the longer
455 edge (594 mm) of the ISO A2 medium
456 'iso-a2x4-white': Specifies the ISO A2X4 white medium having the width of the longer edge (594
457 mm) of the ISO A2 medium
458 'iso-a2x4-transparent': Specifies the ISO A2X4 transparent medium having the width of the longer
459 edge (594 mm) of the ISO A2 medium
460 'iso-a2x4-translucent': Specifies the ISO A2X4 translucent medium having the width of the longer
461 edge (594 mm) of the ISO A2 medium
462 'iso-a2x5-white': Specifies the ISO A2X5 white medium having the width of the longer edge (594
463 mm) of the ISO A2 medium
464 'iso-a2x5-transparent': Specifies the ISO A2X5 transparent medium having the width of the longer
465 edge (594 mm) of the ISO A2 medium
466 'iso-a2x5-translucent': Specifies the ISO A2X5 translucent medium having the width of the longer
467 edge (594 mm) of the ISO A2 medium
468 'iso-a3x3-white': Specifies the ISO A3X3 white medium having the width of the longer edge (420
469 mm) of the ISO A3 medium
470 'iso-a3x3-transparent': Specifies the ISO A3X3 transparent medium having the width of the longer
471 edge (420 mm) of the ISO A3 medium
472 'iso-a3x3-translucent': Specifies the ISO A3X3 translucent medium having the width of the longer
473 edge (420 mm) of the ISO A3 medium
474 'iso-a3x4-white': Specifies the ISO A3X4 white medium having the width of the longer edge (420
475 mm) of the ISO A3 medium

476 'iso-a3x4-transparent': Specifies the ISO A3X4 transparent medium having the width of the longer
477 edge (420 mm) of the ISO A3 medium

478 'iso-a3x4-translucent': Specifies the ISO A3X4 translucent medium having the width of the longer
479 edge (420 mm) of the ISO A3 medium

480 'iso-a3x5-white': Specifies the ISO A3X5 white medium having the width of the longer edge (420
481 mm) of the ISO A3 medium

482 'iso-a3x5-transparent': Specifies the ISO A3X5 transparent medium having the width of the longer
483 edge (420 mm) of the ISO A3 medium

484 'iso-a3x5-translucent': Specifies the ISO A3X5 translucent medium having the width of the longer
485 edge (420 mm) of the ISO A3 medium

486 'iso-a3x6-white': Specifies the ISO A3X6 white medium having the width of the longer edge (420
487 mm) of the ISO A3 medium

488 'iso-a3x6-transparent': Specifies the ISO A3X6 transparent medium having the width of the longer
489 edge (420 mm) of the ISO A3 medium

490 'iso-a3x6-translucent': Specifies the ISO A3X6 translucent medium having the width of the longer
491 edge (420 mm) of the ISO A3 medium

492 'iso-a3x7-white': Specifies the ISO A3X7 white medium having the width of the longer edge (420
493 mm) of the ISO A3 medium

494 'iso-a3x7-transparent': Specifies the ISO A3X7 transparent medium having the width of the longer
495 edge (420 mm) of the ISO A3 medium

496 'iso-a3x7-translucent': Specifies the ISO A3X7 translucent' medium having the width of the longer
497 edge (420 mm) of the ISO A3 medium

498 'iso-a4x3-white': Specifies the ISO A4X3 white medium having the width of the longer edge (297
499 mm) of the ISO A4 medium

500 'iso-a4x3-transparent': Specifies the ISO A4X3 transparent medium having the width of the longer
501 edge (297 mm) of the ISO A4 medium

502 'iso-a4x3-translucent': Specifies the ISO A4X3 translucent' medium having the width of the longer
503 edge (297 mm) of the ISO A4 medium

504 'iso-a4x4-white': Specifies the ISO A4X4 white medium having the width of the longer edge (297
505 mm) of the ISO A4 medium

506 'iso-a4x4-transparent': Specifies the ISO A4X4 transparent medium having the width of the longer
507 edge (297 mm) of the ISO A4 medium

508 'iso-a4x4-translucent': Specifies the ISO A4X4 translucent medium having the width of the longer
509 edge (297 mm) of the ISO A4 medium

510 'iso-a4x5-white': Specifies the ISO A4X5 white medium having the width of the longer edge (297
511 mm) of the ISO A4 medium

512 'iso-a4x5-transparent': Specifies the ISO A4X5 transparent medium having the width of the longer
513 edge (297 mm) of the ISO A4 medium

514 'iso-a4x5-translucent': Specifies the ISO A4X5 translucent medium having the width of the longer
515 edge (297 mm) of the ISO A4 medium

516 'iso-a4x6-white': Specifies the ISO A4X6 white medium having the width of the longer edge (297
517 mm) of the ISO A4 medium

518 'iso-a4x6-transparent': Specifies the ISO A4X6 transparent medium having the width of the longer
519 edge (297 mm) of the ISO A4 medium

520 'iso-a4x6-translucent': Specifies the ISO A4X6 translucent medium having the width of the longer
521 edge (297 mm) of the ISO A4 medium

522 'iso-a4x7-white': Specifies the ISO A4X7 white medium having the width of the longer edge (297
523 mm) of the ISO A4 medium
524 'iso-a4x7-transparent': Specifies the ISO A4X7 transparent medium having the width of the longer
525 edge (297 mm) of the ISO A4 medium
526 'iso-a4x7-translucent': Specifies the ISO A4X7 translucent medium having the width of the longer
527 edge (297 mm) of the ISO A4 medium
528 'iso-a4x8-white': Specifies the ISO A4X8 white medium having the width of the longer edge (297
529 mm) of the ISO A4 medium
530 'iso-a4x8-transparent': Specifies the ISO A4X8 transparent medium having the width of the longer
531 edge (297 mm) of the ISO A4 medium
532 'iso-a4x8-translucent': Specifies the ISO A4X8 translucent medium having the width of the longer
533 edge (297 mm) of the ISO A4 medium
534 'iso-a4x9-white': Specifies the ISO A4X9 white medium having the width of the longer edge (297
535 mm) of the ISO A4 medium
536 'iso-a4x9-transparent': Specifies the ISO A4X9 transparent medium having the width of the longer
537 edge (297 mm) of the ISO A4 medium
538 'iso-a4x9-translucent': Specifies the ISO A4X9 translucent medium having the width of the longer
539 edge (297 mm) of the ISO A4 medium

540

541 The following standard values are defined for Japanese and European Standard (i.e. ISO) engineering
542 media, which are either a long fixed size [ASME-Y14.1M] or roll feed, for devices that provide the
543 "synchro-cut" feature (see section 14.1):

544 'iso-a0xsynchro-white': Specifies the paper having the width of the longer edge (1189 mm) of the ISO
545 A0 white medium and cuts synchronizing with data.
546 'iso-a0xsynchro-transparent': Specifies the paper having the width of the longer edge (1189 mm) of
547 the ISO A0 transparent medium and cuts synchronizing with data.
548 'iso-a0xsynchro-translucent': Specifies the paper having the width of the longer edge (1189 mm) of the
549 ISO A0 translucent medium and cuts synchronizing with data.
550 'iso-a1xsynchro-white': Specifies the paper having the width of the longer edge (841 mm) of the ISO
551 A1 white medium and cuts synchronizing with data.
552 'iso-a1xsynchro-transparent': Specifies the paper having the width of the longer edge (841 mm) of the
553 ISO A1 transparent medium and cuts synchronizing with data.
554 'iso-a1xsynchro-translucent': Specifies the paper having the width of the longer edge (841 mm) of the
555 ISO A1 translucent medium and cuts synchronizing with data.
556 'iso-a2xsynchro-white': Specifies the paper having the width of the longer edge (594 mm) of the ISO
557 A2 white medium and cuts synchronizing with data.
558 'iso-a2xsynchro-transparent': Specifies the paper having the width of the longer edge (594 mm) of the
559 ISO A2 transparent medium and cuts synchronizing with data.
560 'iso-a2xsynchro-translucent': Specifies the paper having the width of the longer edge (594 mm) of the
561 ISO A2 translucent medium and cuts synchronizing with data.
562 'iso-a3xsynchro-white': Specifies the paper having the width of the longer edge (420 mm) of the ISO
563 A3 white medium and cuts synchronizing with data.
564 'iso-a3xsynchro-transparent': Specifies the paper having the width of the longer edge (420 mm) of the
565 ISO A3 transparent medium and cuts synchronizing with data.

566 'iso-a3synchro-translucent': Specifies the paper having the width of the longer edge (420 mm) of the
567 ISO A3 translucent medium and cuts synchronizing with data.
568 'iso-a4synchro-white': Specifies the paper having the width of the longer edge (297 mm) of the ISO
569 A4 white medium and cuts synchronizing with data.
570 'iso-a4synchro-transparent': Specifies the paper having the width of the longer edge (297 mm) of the
571 ISO A4 transparent medium and cuts synchronizing with data.
572 'iso-a4synchro-translucent': Specifies the paper having the width of the longer edge (297 mm) of the
573 ISO A4 transparent medium and cuts synchronizing with data.
574

575 The following standard values are defined for American Standard (i.e. ANSI) engineering media, American
576 Architectural engineering media, and Japanese and European Standard (i.e. ISO) engineering media, which
577 are either a long fixed size [ASME-Y14.1M] or roll feed, for devices that provide the "synchro-cut" feature
578 and/or the "auto-select" feature (see section 14.1):

579 'auto-white': Specifies that the printer selects the white medium with the appropriate fixed size (e.g.
580 a1, a2, etc.) or data-synchro size, and the selection is implementation-defined.
581 'auto-transparent': Specifies that the printer selects the transparent medium with the appropriate fixed
582 size (e.g. a1, a2, etc.) or data-synchro size, and the selection is implementation-defined.
583 'auto-translucent': Specifies that the printer selects the translucent medium with the appropriate fixed
584 size (e.g. a1, a2, etc.) or data-synchro size, and the selection is implementation-defined.
585 'auto-fixed-size-white': Specifies that the printer selects the white medium with the appropriate fixed
586 size (e.g. a1, a2, etc.) or the appropriate long fixed size listed above.
587 'auto-fixed-size-transparent': Specifies that the printer selects the transparent medium with the
588 appropriate fixed size (e.g. a1, a2, etc.) or the appropriate long fixed size listed above.
589 'auto-fixed-size-translucent': Specifies that the printer selects the translucent medium with the
590 appropriate fixed size (e.g. a1, a2, etc.) or the appropriate long fixed size listed above.
591 'auto-synchro-white': Specifies that the printer selects the white paper with the appropriate width and
592 cuts it synchronizing with data.
593 'auto-synchro-transparent': Specifies that the printer selects the transparent paper with the appropriate
594 width and cuts it synchronizing with data.
595 'auto-synchro-translucent': Specifies that the printer selects the translucent paper with the appropriate
596 width and cuts it synchronizing with data.

597

598 The following standard values are defined for input-trays (from ISO DPA and the Printer MIB):

599 'top': The top input tray in the printer.
600 'middle': The middle input tray in the printer.
601 'bottom': The bottom input tray in the printer.
602 'envelope': The envelope input tray in the printer.
603 'manual': The manual feed input tray in the printer.
604 'large-capacity': The large capacity input tray in the printer.
605 'main': The main input tray
606 'side': The side input tray

607

608 The following standard values are defined for media sizes (from ISO DPA):

609 'iso-a0': Specifies the ISO A0 size: 841 mm by 1189 mm as defined in ISO 216
610 'iso-a1': Specifies the ISO A1 size: 594 mm by 841 mm as defined in ISO 216
611 'iso-a2': Specifies the ISO A2 size: 420 mm by 594 mm as defined in ISO 216
612 'iso-a3': Specifies the ISO A3 size: 297 mm by 420 mm as defined in ISO 216
613 'iso-a4': Specifies the ISO A4 size: 210 mm by 297 mm as defined in ISO 216
614 'iso-a5': Specifies the ISO A5 size: 148 mm by 210 mm as defined in ISO 216
615 'iso-a6': Specifies the ISO A6 size: 105 mm by 148 mm as defined in ISO 216
616 'iso-a7': Specifies the ISO A7 size: 74 mm by 105 mm as defined in ISO 216
617 'iso-a8': Specifies the ISO A8 size: 52 mm by 74 mm as defined in ISO 216
618 'iso-a9': Specifies the ISO A9 size: 37 mm by 52 mm as defined in ISO 216
619 'iso-a10': Specifies the ISO A10 size: 26 mm by 37 mm as defined in ISO 216
620 'iso-b0': Specifies the ISO B0 size: 1000 mm by 1414 mm as defined in ISO 216
621 'iso-b1': Specifies the ISO B1 size: 707 mm by 1000 mm as defined in ISO 216
622 'iso-b2': Specifies the ISO B2 size: 500 mm by 707 mm as defined in ISO 216
623 'iso-b3': Specifies the ISO B3 size: 353 mm by 500 mm as defined in ISO 216
624 'iso-b4': Specifies the ISO B4 size: 250 mm by 353 mm as defined in ISO 216
625 'iso-b5': Specifies the ISO B5 size: 176 mm by 250 mm as defined in ISO 216
626 'iso-b6': Specifies the ISO B6 size: 125 mm by 176 mm as defined in ISO 216
627 'iso-b7': Specifies the ISO B7 size: 88 mm by 125 mm as defined in ISO 216
628 'iso-b8': Specifies the ISO B8 size: 62 mm by 88 mm as defined in ISO 216
629 'iso-b9': Specifies the ISO B9 size: 44 mm by 62 mm as defined in ISO 216
630 'iso-b10': Specifies the ISO B10 size: 31 mm by 44 mm as defined in ISO 216
631 'na-letter': Specifies the North American letter size: 8.5 inches by 11 inches
632 'na-legal': Specifies the North American legal size: 8.5 inches by 14 inches
633 'executive': Specifies the executive size (7.25 X 10.5 in)
634 'folio': Specifies the folio size (8.5 X 13 in)
635 'invoice': Specifies the invoice size (5.5 X 8.5 in)
636 'ledger': Specifies the ledger size (11 X 17 in)
637 'quarto': Specifies the quarto size (8.5 X 10.83 in)
638 'iso-c3': Specifies the ISO C3 size: 324 mm by 458 mm as defined in ISO 269
639 'iso-c4': Specifies the ISO C4 size: 229 mm by 324 mm as defined in ISO 269
640 'iso-c5': Specifies the ISO C5 size: 162 mm by 229 mm as defined in ISO 269
641 'iso-c6': Specifies the ISO C6 size: 114 mm by 162 mm as defined in ISO 269
642 'iso-designated-long': Specifies the ISO Designated Long size: 110 mm by 220 mm as defined in ISO
643 269
644 'na-10x13-envelope': Specifies the North American 10x13 size: 10 inches by 13 inches
645 'na-9x12-envelope': Specifies the North American 9x12 size: 9 inches by 12 inches
646 'na-number-10-envelope': Specifies the North American number 10 business envelope size: 4.125
647 inches by 9.5 inches
648 'na-7x9-envelope': Specifies the North American 7x9 inch envelope size
649 'na-9x11-envelope': Specifies the North American 9x11 inch envelope size
650 'na-10x14-envelope': Specifies the North American 10x14 inch envelope size
651 'na-number-9-envelope': Specifies the North American number 9 business envelope size
652 'na-6x9-envelope': Specifies the North American 6x9 envelope size

653 'na-10x15-envelope': Specifies the North American 10x15 envelope size
654 'monarch-envelope': Specifies the Monarch envelope size (3.87 x 7.5 in)
655 'jis-b0': Specifies the JIS B0 size: 1030mm x 1456mm
656 'jis-b1': Specifies the JIS B1 size: 728mm x 1030mm
657 'jis-b2': Specifies the JIS B2 size: 515mm x 728mm
658 'jis-b3': Specifies the JIS B3 size: 364mm x 515mm
659 'jis-b4': Specifies the JIS B4 size: 257mm x 364mm
660 'jis-b5': Specifies the JIS B5 size: 182mm x 257mm
661 'jis-b6': Specifies the JIS B6 size: 128mm x 182mm
662 'jis-b7': Specifies the JIS B7 size: 91mm x 128mm
663 'jis-b8': Specifies the JIS B8 size: 64mm x 91mm
664 'jis-b9': Specifies the JIS B9 size: 45mm x 64mm
665 'jis-b10': Specifies the JIS B10 size: 32mm x 45mm

666 The following standard values are defined for American Standard (i.e. ANSI) engineering media sizes:

667 'a': Specifies the engineering ANSI A size medium: 8.5 inches x 11 inches
668 'b': Specifies the engineering ANSI B size medium: 11 inches x 17 inches
669 'c': Specifies the engineering ANSI C size medium: 17 inches x 22 inches
670 'd': Specifies the engineering ANSI D size medium: 22 inches x 34 inches
671 'e': Specifies the engineering ANSI E size medium: 34 inches x 44 inches
672

673 The following standard values are defined for American Architectural engineering media sizes:

674 'arch-a': Specifies the Architectural A size medium: 9 inches x 12 inches
675 'arch-b': Specifies the Architectural B size medium: 12 inches x 18 inches
676 'arch-c': Specifies the Architectural C size medium: 18 inches x 24 inches
677 'arch-d': Specifies the Architectural D size medium: 24 inches x 36 inches
678 'arch-e': Specifies the Architectural E size medium: 36 inches x 48 inches
679
680

681 **14.1. Examples**

682 Below are examples to supplement the engineering media value definitions.

683

684

685

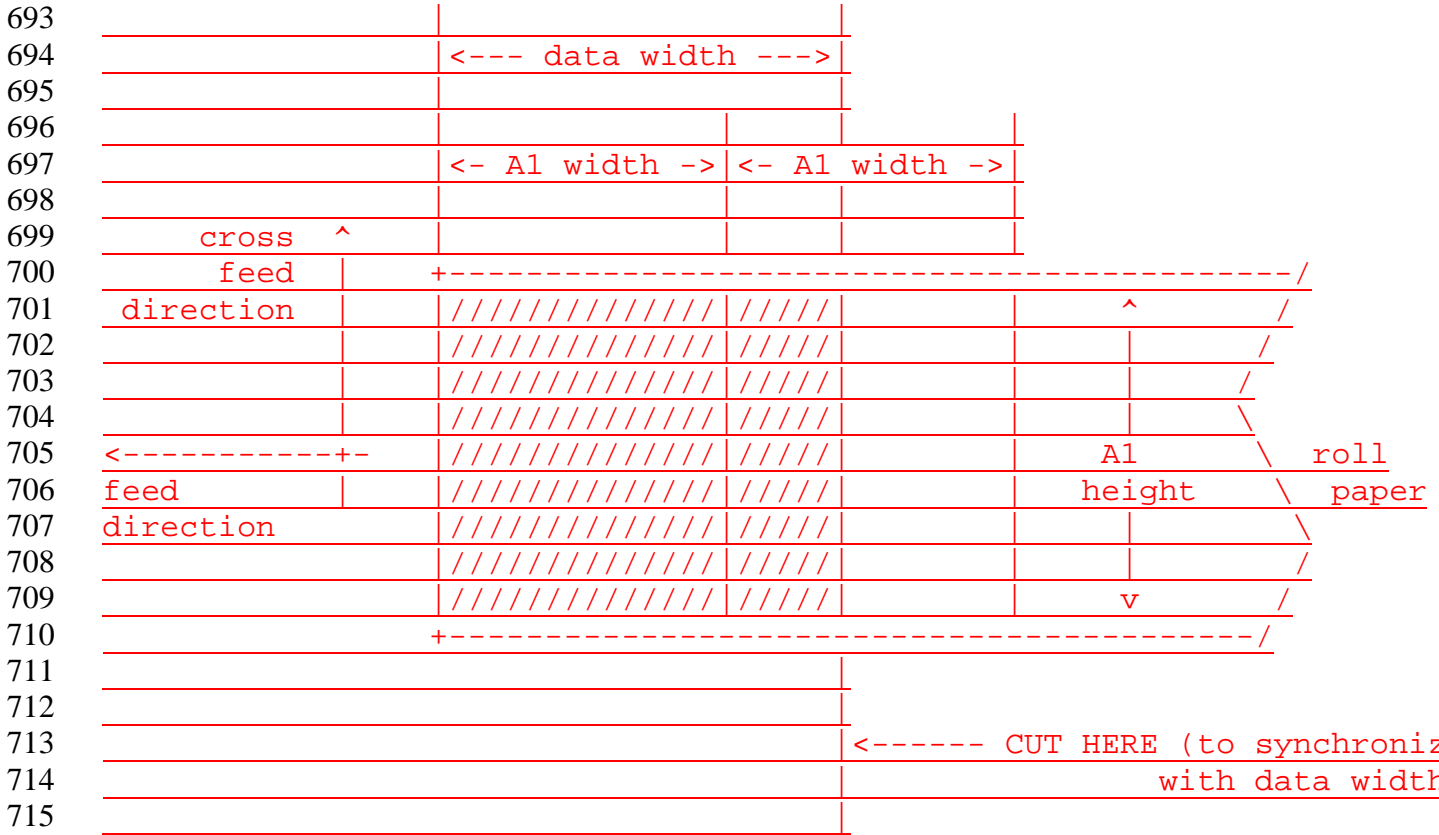
686

687

688 Example 1: "Synchro-Cut", a device cutting the roll paper in synchronization with the data

689 data height: A1 height
 690 data width (shaded): A1 width < data width < (A1 width) x 2
 691 specified value: 'iso-alxsynchro-white'

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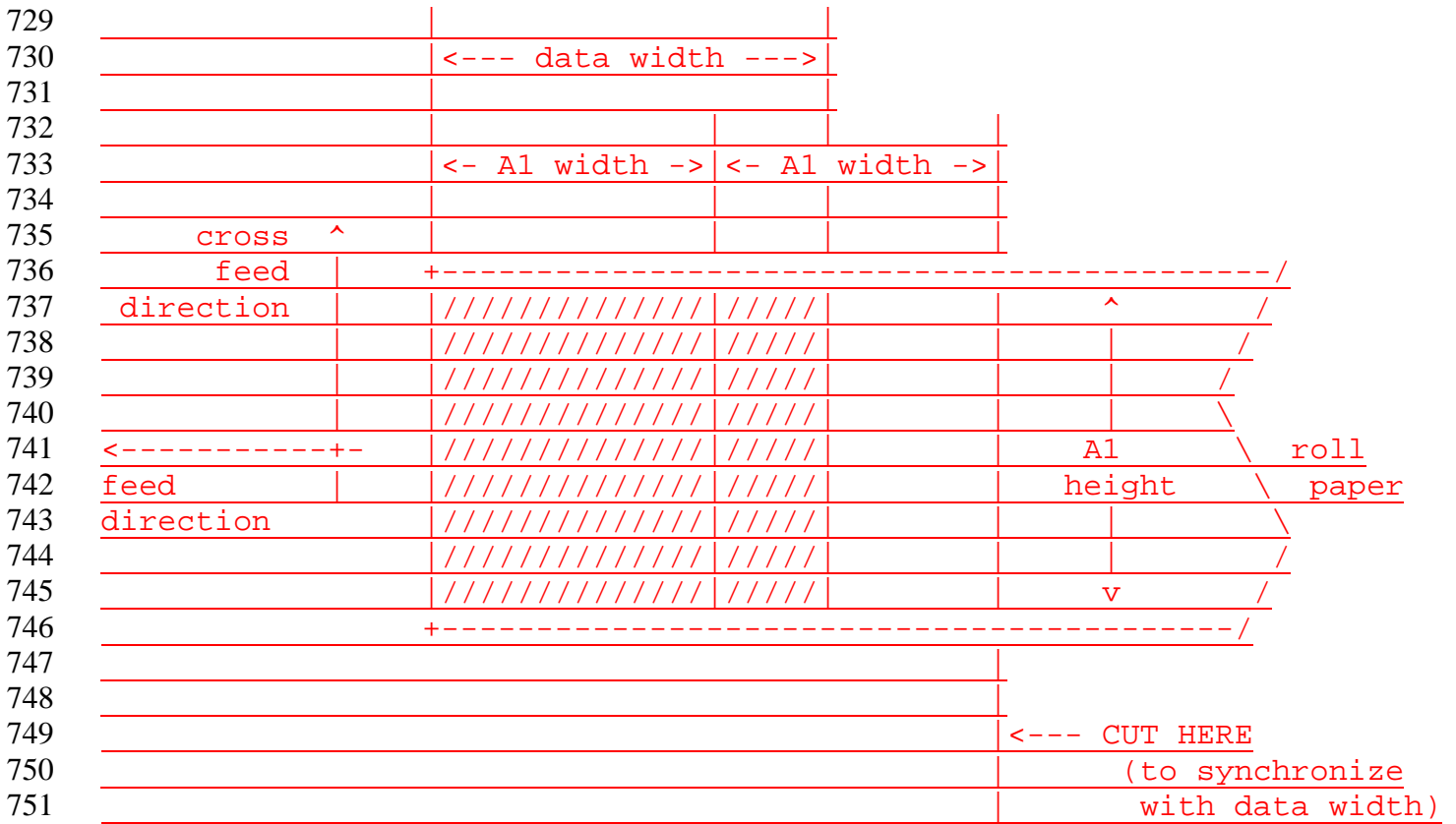
722

723

724 Example 2: "Auto-Cut", a device cutting the roll paper at multiples of fixed-size media width

725 data height: A1 height
 726 data width (shaded): A1 width < data width < (A1 width) x 2
 727 specified value: 'auto-fixed-size-white'

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760 Example 3: the 'iso-a4x4-white' fixed size paper

761	paper height:	A4 height
762	paper width:	(A4 width) x 4
763	specified value:	'iso-a4x4-white'

764

765				
766	<- A4 width ->	<- A4 width ->	<- A4 width ->	<- A4 width ->
767				
768				
769	+-----+-----+-----+-----+			
770	^			
771				
772				
773	A4			
774	height			
775				
776				
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778	v			
779	+-----+-----+-----+-----+			

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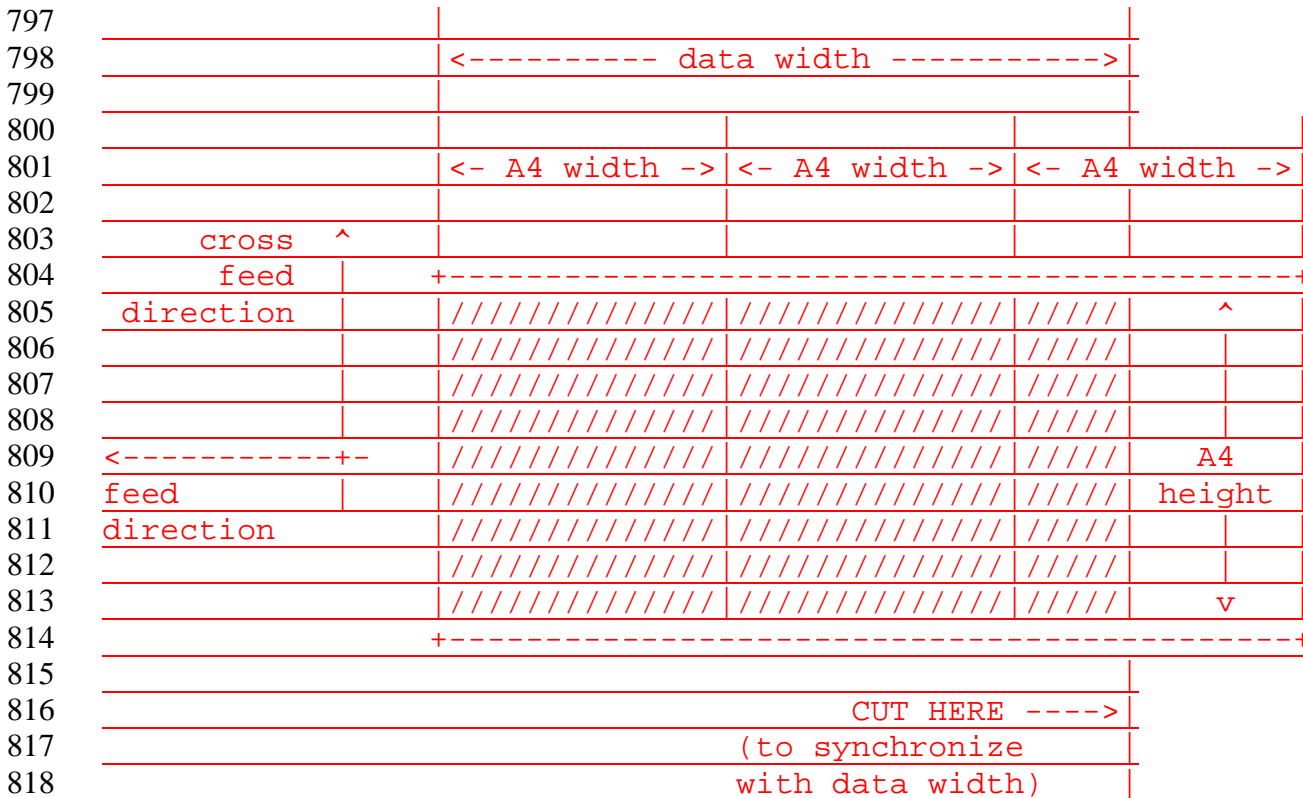
790

791

792 Example 4: "Synchro-Cut", a device cutting the fixed size paper in synchronization with the data

793 data height: A4 height
 794 data width (shaded): (A4 width) x 2 < data width < (A4 width) x 3
 795 specified value: 'iso-a4synchro-white'

796



819

820 **2 IANA Considerations**

821 These "media" type3 keyword attribute values will be published by IANA according to the procedures in
822 RFC 2566 [rfc2566] section 6.1 with the following URL:

823 <ftp.isi.edu/iana/assignments/ipp/attribute-values/media/engineering.txt>

824 **3 Internationalization Considerations**

825 Normally a client will provide localization of the keywords values of this attribute to the language of the
826 user. On the other hand, the client will not localize any name values for the "media" attribute defined by
827 the system administrator of the IPP Printer (see [ipp-mod] section 4.1.2 and 4.1.3).

828 **4 Security Considerations**

829 This extension poses no additional security threats or burdens than those in IPP/1.0 [RFC2566, RFC2565]
830 and IPP/1.1 [ipp-mod, ipp-pro]. However, implementations MAY support different access control to
831 various media, depending on the identity of the job submitting user.

832 **5 References**

833 [ASME-Y14.1M]

834 Metric Drawing Sheet Size and Format, ASME Y14.1M-1995. This standard defines metric sheet
835 sizes and formats for engineering drawings.

836 [ipp-iig]

837 Hastings, T., Manros, C., "Internet Printing Protocol/1.1: <draft-ietf-ipp-implementers-guide-v11-
838 00.txt>, work in progress, September 27, 1999.

839 [ipp-mod]

840 R. deBry, T. Hastings, R. Herriot, S. Isaacson, P. Powell, "Internet Printing Protocol/1.1: Model and
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